An Overview of ITS in Canada

Deployment Issues

A recent Transportation Association of Canada (TAC) national survey of provincial jurisdictions identified opportunities and barriers to ITS deployment in Canada:

Opportunities for ITS	Barriers to ITS Deployment
• Enforcement of regulations • Safety, road maintenance • Border crossings/trade corridors • Data collection, traveller information • Traffic management	• Lack of funding, and high costs relative to benefits • Lack of adequate staffing with necessary skills and knowledge • Lack of national and regional strategies

Canada faces unique challenges when it comes to ITS. Distinct features such as our large land mass, dispersed population, climate, existing ITS, use of the metric system, communication requirements (including infrastructure and bilingualism), and organizational relationships, will all affect how ITS becomes integrated into our transportation systems provincially, nationally and internationally.

Transport Canada

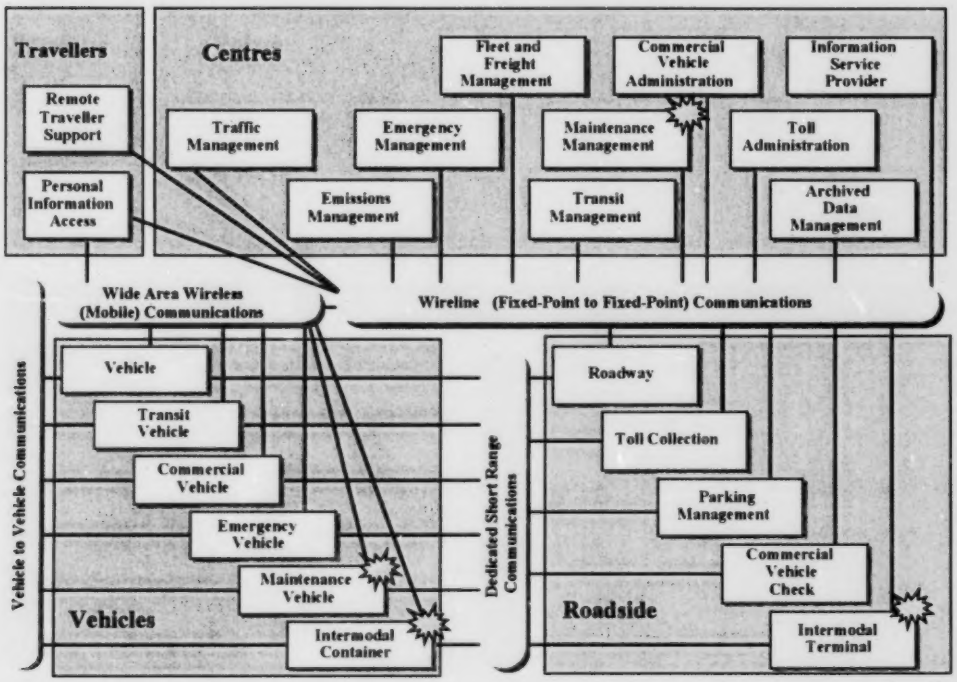
Transport Canada has assumed a key role in developing a national ITS plan. In November 1999, Transport Canada released "An ITS Plan for Canada: En Route to Intelligent Mobility." Transport Canada promotes the use of ITS, and has suggested that future federal funding will likely be available for ITS projects. The plan focuses on five activity areas: partnerships for knowledge, developing Canada's ITS architecture, multi-modal ITS research and development, deployment and integration of ITS across Canada, and strengthening Canada's ITS industry. The activity areas are at varying stages of development. Input from the relevant stakeholders, including Alberta, is being sought.

Development of a Canadian ITS Architecture

In June 2000, Transport Canada released a final report on the development of the Canadian ITS Architecture. This report presents a review of international architecture development and available ITS technologies, and their applicability to Canada. The report proposes a framework for the Canadian ITS Architecture and identifies a number of Canadian ITS User Services.

Once completed, the Canadian ITS architecture will provide a framework for communication among the various ITS technologies. This is necessary to ensure that interoperable deployment of ITS can occur across the nation and with the US. Given our country's close ties to and the benefits of interoperability with the US, Canada's Architecture is being modeled after the American's. However, Canada's distinct features are being considered in the development of our national ITS architecture. The following diagram illustrates the framework of the Canadian ITS architecture:

The Canadian Architecture for I T S



Other Jurisdictions

Canada has used ITS for over 25 years and other Canadian provinces are moving forward with ITS development. Every province has at least one ITS application and many provinces are also developing ITS strategic plans to coordinate deployment. The most common ITS applications are in Travel and Traffic Management Services, Public Transport Services, Commercial Vehicle Operations and Electronic Payment.